

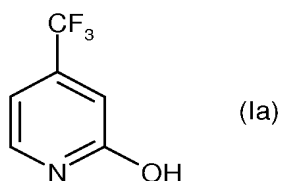
### Claim Amendment

5. (Withdrawn).

6. (Withdrawn).

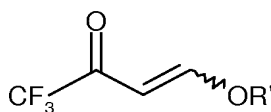
7. (Withdrawn).

8. (New) Process according to Claim 1 for the preparation of 4-trifluoromethyl-2-pyridinol



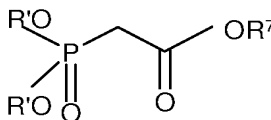
which comprises:

i) contacting a 4-alkoxy-1,1,1-trifluorobut-3-en-2-one of the formula



in which R' represents C<sub>1</sub>-C<sub>6</sub> alkyl,

with a trialkyl phosphonoacetate of the formula:



in which R' is as previously defined,

and

R<sup>7</sup> represents C<sub>1</sub>-C<sub>6</sub> alkyl

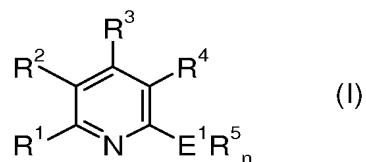
in the presence of a base and an alcoholic solvent to provide a mixture of intermediates,

and

ii) cyclizing the mixture of intermediates in the presence of ammonia to provide 4-trifluoromethyl-2-pyridinol.

## Listing of Claims

1. (Original) Process for the preparation of substituted pyridine derivatives of formula (I)



wherein

$R^1$ ,  $R^2$  independently the same or different are H;  $C_{1-20}$ -alkyl (branched or straight chain or cyclic);  $C_{6-20}$ -aryl - which each of those may be substituted with one or more of the following groups: F, Cl, Br, I,  $C_{1-20}$ -alkoxy,  $C_{6-20}$ -aryloxy, amino; F; Cl; Br; I;

$R^3$  = CN,  $NO_2$ ,  $C_{1-20}$ -alkyl (branched or straight chain or cyclic);  $C_{6-20}$ -aryl - which each of those may be substituted with one or more of the following groups: F, Cl, Br, I,  $C_{1-20}$ -alkoxy,  $C_{6-20}$ -aryloxy, amino; F; Cl; Br; I;

$R^4 = E_n R_m^6$  in which

if  $n = m = 1$  than  $E = S$  and  $R^6 = C_{1-20}$ -alkyl (branched or straight chain or cyclic);  $C_{6-20}$ -aryl - which each of those may be substituted with one or more of the following groups: F, Cl, Br, I,  $C_{1-20}$ -alkoxy,  $C_{6-20}$ -aryloxy, amino; F, Cl, Br, I;

if  $n = 0$  and  $m = 1$  than  $R^6 = H$ ,  $C_{1-20}$ -alkyl (branched or straight chain or cyclic);  $C_{6-20}$ -aryl - which each of those may be substituted with one or more of the following groups: F, Cl, Br, I,  $C_{1-20}$ -alkoxy,  $C_{6-20}$ -aryloxy, amino; F, Cl, Br, I;

$E^1 = O, N$

$R^5 = H$

$n = 1$  for  $E^1 = O$  und  $2$  for  $E^1 = N$

comprising reaction of a  $\alpha$ - $\beta$ -unsaturated carbonyl compound of formula (II)

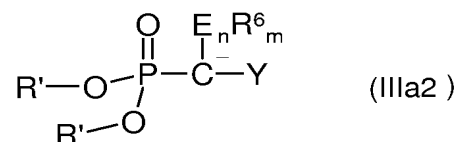
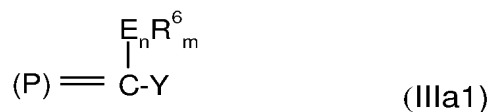


wherein

$R^1$ ,  $R^2$  and  $R^3$  have the above defined meaning;

$G = -NH_2$  or a leaving group

with a Wittig reagent or Horner-Wadsworth-Emmons reagent of formula (III)



wherein

$(P) = P(Ar)_3$ , with  $Ar =$  substituted or preferably unsubstituted  $C_{6-20}$  aryl,  $R'$  = is equal or different independently means  $C_{1-20}$  alkyl, branched or straight or cyclic, or  $C_{6-20}$  aryl;

$E_n R^6_m =$  in which

if  $n = m = 1$  than  $E = S$  and  $R^6 = C_{1-20}$ -alkyl (branched or straight chain or cyclic);  $C_{6-20}$ -aryl - which each of those may be substituted with one or more of the following groups: F, Cl, Br, I,  $C_{1-20}$ -alkoxy,  $C_{6-20}$ -aryloxy, amino; F; Cl; Br; I;

if  $n = 0$  and  $m = 1$  than  $R^6 = H$ ,  $C_{1-20}$ -alkyl (branched or straight chain or cyclic);  $C_{6-20}$ -aryl - which each of those may be substituted with one or more of the following groups: F, Cl, Br, I,  $C_{1-20}$ -alkoxy,  $C_{6-20}$ -aryloxy, amino; F; Cl; Br; I;

Y = -CN; -C(O)NH<sub>2</sub>; -C(O)OR<sup>7</sup> with R<sup>7</sup> = as defined for R<sup>1</sup> above, except H

in the presence of a base and if

- i) Y = -CN or C(O)NH<sub>2</sub>, G = a leaving group and the base is an alcoholate, subsequent acidic catalyzed, with zeolithes catalyzed or basic catalyzed cyclization;
- ii) Y = -C(O)-OR<sup>7</sup>, G = a leaving group and the base is an alcoholate, subsequent basic cyclization in the presence of ammonia.

2. (Original) Process according to claim 1, wherein R<sup>1</sup> = R<sup>2</sup> = H and R<sup>3</sup> = electron withdrawing group.

3. (Original) Process according to claims 1 to 2, wherein R<sup>1</sup> = R<sup>2</sup> = H and R<sup>3</sup> is a partially or fully fluorinated C<sub>1-6</sub>-alkylgroup.

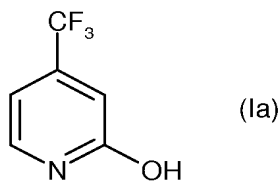
4. (Original) Process according to claims 1 to 3, wherein R<sup>3</sup> = -CF<sub>3</sub>.

5. (Withdrawn)

6. (Withdrawn)

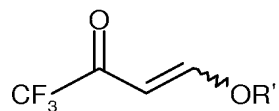
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8. (New) Process according to Claim 1 for the preparation of 4-trifluoromethyl-2-pyridinol



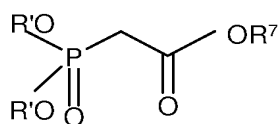
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R<sup>7</sup> represents C<sub>1</sub>-C<sub>6</sub> alkyl

in the presence of a base and an alcoholic solvent to provide a mixture of intermediates,

and

ii) cyclizing the mixture of intermediates in the presence of ammonia to provide 4-trifluoromethyl-2-pyridinol.